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(54) Title: DIESEL EXHAUST GAS FILTER

(57) Abstract

A filter device for filtering soot particles from diesel engine exhaust gases comprises a casing, a shaped porous filter body, preferably of silicon carbide, SiC, such as a honeycomb structure wall flow filter body made from SiC particles. A membrane made from particles and/or fibres and having a smaller pore size than the filter body is applied on the gas outlet side surfaces of the filter body, and a catalytically active coating is applied on, and in the interior of, the filter body, e.g., on a wash coating. The design of the filter body with the small pore size membrane applied to outlet surfaces allows soot particles to travel into the interior of the filter which has relatively large pores and where they are removed by decomposition by contact with the catalyst deposited in the filter body. Due to the small pore size of the membrane on the outlet side, the filter is able to remove very small soot particles, and due to the large active area where an oxidation catalyst and the trapped soot interact, the temperature at which the soot is decomposed is relatively low.